

DRAFT DEQ/EPA NAPL and Riverbank Meeting Notes

Conference Call
January 29, 2016

Attendees:

- Sarah Greenfield, DEQ
- Matt McClincy, DEQ
- Sean Sheldrake, EPA
- Scott Coffey, CDM Smith
- Eric Blischke, CDM Smith
- Gary Hazen, CDM Smith
- Lance Peterson, CDM Smith

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The following topics were discussed with associated take-aways. Notes regarding each topic are presented below.

1. NAPL treatment and disposal: DEQ to follow-up with the AG's office how RCRA applies to Arkema (contained-in item)
2. Riverbank/RAO9: DEQ to draft a "common understanding"
3. FS definition of sediment at the RB: the lower RB may be considered sediment in RD
4. Sites where RB is pulled into DEQ FS: DEQ will give EPA opportunity to review DEQ FS documents for consistency with the EPA FS

NAPL treatment and disposal notes:

Sean: purpose of discussion is NAPL footprint/disposal (contained-in)

Matt: confirms Arkema is specific topic for DEQ.

- Gives overview of Arkema CSM: NAPL is in the system but not much identified offshore, questions whether it rises to the level of NAPL.
 - DDT was produced in batch processes (1940 era), DDT was skimmed off and residual spent acid and chlorobenzene went down a floor drain connected to the Willamette (buried pipe between the Docks 1 and 2 has high DDT/sheen). This disposal practice only occurred for a short period of time (weeks or months?).
 - An upland waste disposal pond with overflow trench was constructed, same spent acid and chlorobenzene infiltrated, hit a silt layer about 25 ft. bgs and flowed horizontally; Contaminated zone is about 1-inch thick at the riverbank and projects offshore.
 - There has been detailed offshore characterization (numerous borings), did not see NAPL.
 - Grab GW samples (offshore?) have shown high chlorobenzene concentrations.
- Conclusion: NAPL has been identified in sediment, sediment is NAPL containing for disposal purposes, is appropriate to manage during RD, should not map out now as a big NAPL-containing area.

Sean: acknowledges Matt's point, inquiries about NAPL acreage (3-4 acres?).

Scott: roughly yes, but that area is not just NAPL, it contains a mixture of chemicals, designated as “not reliably contained”.

Matt: refers to 2003 Arkema investigation, large source in the stranded wedge, will need to contain it.

Eric: reminds group of the capping model, can't be reliably contained (NRC), chlorobenzene threshold is driver.

Matt: acknowledges the work (has read it), yes there is high concentration but the source term is the stranded wedge.

Eric: mix of chemicals present, likely will require special management during disposal.

Matt: if there's high chlorobenzene then it will fail TCLP (wants to make sure we're all looking at the same thing).

Gary: There are really two steps to the discussion of how NRC and NAPL PTW are addressed in the FS; one is how waste is classified for disposal during implementation of a remedy and the other is simplifying assumptions made for evaluations and costing in the FS. The disposal decision tree provides the framework for waste classification and disposal. If the agencies agree on the decision tree, then the remaining step is the assumptions made using the decision tree for the waste categories evaluated in the FS. The FS combined NRC and NAPL together.

Matt: not sure if DEQ has seen the most recent version of the disposal decision tree.

Sean: how are the 3-4 Arkema NAPL acres dealt with?

Gary: walks through decision tree....points out that the flowchart indicates for listed and characteristic wastes as well as NAPL that generally treatment and Subtitle C disposal are required unless a “contained in” determination is made

Matt: wonders about disposal facility mindset: is it “saturated”?, how to screen for NAPL?, states that it's EPA's decision in the end.

Eric: wonders if it's a big cost driver?

Scott: We are developing a table that will identify major cost drivers

Matt: DEQ had a concern about thermal treatment.

Gary: disposal decision tree does not specifically identify thermal treatment although may be needed to meet LDRs for hazardous waste, EPA is exploring cement solidification/stabilization consistent with early actions.

Matt: gives a waste characterization FYI:

- If high chlorobenzene then could fail TCLP; 2 considerations: 1) characteristic waste; 2) State pesticide waste (LDR does not apply, needs to go to Subtitle C landfill)

- Oregon not sure if Subtitle D landfill is feasible, can work if below a very low concentration of 18 ppt
- A recent Oregon updated contained in – could apply to Arkema?
- Problem: disposal options are written into pesticide residue rule; Oregon needs to explore further

Sean: assume Subtitle C for now, can Oregon pursue for clarification?

Matt: will assume Subtitle C for now for pesticide wastes, if NRC/NAPL constituents then would go to Subtitle C

Gary: if contained-in not feasible for pesticide wastes then FS assumption may not be valid – pesticide state listed wastes are currently assumed to go to Subtitle D if not otherwise identified in a NRC/NAPL PTW area in the FS.

Matt: What is timing for State to make a decision?

Sean: “yesterday”. Is simplifying assumption ok for now?

Matt: not sure State can easily get to contained in evaluation.

Gary: Right now for FS we don’t necessarily need a definitive determination; just a reasonable expectation that a contained-in determination could be made. If not then assumption of Subtitle D disposal for pesticide wastes that are not NRC/NAPL may need to be revisited and could impact costs upward

Sean: for now assume a certain amount to Subtitle C and a certain amount to Subtitle D

Matt: will t-up with the AG’s office – maybe get word back in a week?; if there’s 3 acres then the State would prefer to get it out of the river; is in-situ treatment feasible?

Eric: FS is leaning toward removal due to technology assignments (managed via the decision tree)

Matt: will follow-up with the AG’s office; if too late then will need to make assumptions until design

Riverbank/RAO9 notes:

Matt: DEQ staff asking what’s RAO9, what does it mean, have had some discussion with Kristine Koch.

- Understanding: does not change things much, uses in-water sediment PRGs, most RB’s will exceed.
- Is EPA looking at what can get into the river?
- DEQ’s source control approach: armoring is considered; assuming no erosion to river if armored; if there are “holes” then RB is identified as site of concern.
- So has anything changed?

Sean: no change, this is an RAO to reflect DEQ work, if EPA takes over a RB then there will be a complete administrative record documenting justifications for addressing the riverbank.

Matt: can DEQ write up a “common understanding”?

Sean: yes, will ask Eva DeMaria to weigh in, this is an overlap issue, EPA want’s to have flexibility.

Additional DEQ questions:

FS definition of sediment at the RB notes:

Matt: FS states area below mean high water is sediment; is this an erosion question? How is it being dealt with?

Sean: to be resolved in RD; not sure if RAOs for sediment will be applied; will be site by site. For example, steep RB vs. flatter RB (underwater more often). No good answer [now for defining](#) (mentions M&B 5 yr. review task of figuring out where to place passive samplers).

Gary: FS is simplified; using DEQ’s contaminated RB list; draft FS assumed the in-water remedy will be applied to adjacent RB, e.g. dredge vs. cap.

Eric: EPA does not desire a bright line.

Matt: the lower RB may be sediment in RD, will sort out based on topography, geomorphology.

Sites where RB is pulled into DEQ FS (e.g. OR Steel) notes:

Matt: there are a “couple” RB’s going into DEQ FS’s (for SC and eco risk)
Should DEQ pull in one an EPA scenario as one of the potential remedies?

Sean: does DEQ see anything missing?

Matt: this is an “who’s on first item”.

Sean: DEQ’s FS’s should be consistent with EPA’s options, no concerns right now.

Matt: is there a generic RB alternative?

Gary: as discussed earlier, the FS has simplifying assumptions; detailed flowcharts are available that can be looked at to understand what conditions would indicate excavation vs. capping. There are generic assumptions for capping, dredging in terms of slope, etc.

Matt: Arkema and Gunderson are examples of the 2 programs intersecting.

Eric: DEQ should be ok if the FS process is followed.

Matt: DEQ will give EPA opportunity to review DEQ documents.

Sean: concurs with that approach.

Meeting adjourned at approximately 11:00am